

The Relationship between Cost-Volume Profit Management and Profitability in Private Organizations

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Abstract— The study showed that Phoenix academy employees staff with appropriate skills and experience, has the right number of staff purchase school items only when required, have measures to counter school defaulters, do not keep variable cost-volume profits below 30% of incomes, do not take staff for further training, outsource some staff and that the school gives allowances to staff. The study revealed that the school use sales maximization approach to profits they do aim at profit maximization, their profits do not grow steadily over the years, profits are considered basing on the revenues and investments and do not keep profits at 25% of revenues.

Keywords— unit, Cost-volume profit Management, Profitability, behavior, organization.

I. INTRODUCTION

When you acquire supplies or services, you normally expect to pay a smaller price per unit as the purchase quantity increases. You expect contractors to have lower costs per unit as production quantity increases. This general expectation remains the same whether you are buying items specifically built for the Government or items that are mass-produced for a variety of commercial and Government customers. You can use cost-volume-profit analysis to analyze the natural relationship between cost, volume, and profit in pricing decisions. In cost-volume-profit analysis, you:

- Should consider only short-term operations. The short term may be defined as a period too short to permit facilities expansion or contraction or other changes that might affect overall pricing relationships.
- Assume that a straight line can reasonably be used in analysis. While actual price behavior may not follow a straight line, its use can closely approximate actual cost behavior in the short run.

- If purchase volume moves outside the relevant range of the available data, the straight-line assumption and the accuracy of estimates become questionable.
- If you know that product variable costs per unit are decreasing as quantity increases, consider using the log-linear improvement curve concept. Improvement curves are particularly useful in limited production situations where you can obtain cost/price information for all units sold.

Research problem

Cost-volume profit management in every organization determines the level of profitability. Phoenix Academy secondary school has restructured its control systems through credit risk controls and employing the required staff. Despite all the above efforts to minimize operational cost-volume profits, low profitability is still reported.

Research objectives

- i. To establish how cost-volume profits are managed in Phoenix Academy Secondary School.
- ii. To find out the profitability levels and trend registered in the school.
- iii. To establish the relationship between cost-volume profit management and profitability in the school.

Research importance

To establish whether cost-volume profit management affects the profitability levels of Phoenix Academy Secondary School.

Research Significances

Findings of the study will be of great importance to the following beneficiaries in the following ways.

- Phoenix Academy will be able to improve on the management of cost-volume profits as the study

findings will generate new ideas pertaining to cost-volume profit management.

- Business managers will benefit from the study by adopting best ways of cost-volume profit management in order to improve on their profitability levels

Research Methodology

Research design

In order to be consistent with the research objectives and questions in chapter one, cross sectional research and qualitative and quantitative research designs were used in order to collect the relevant data.

Research population

According to Krejcia and Morgan, the study population of Phoenix Secondary School consisted of 40 people, 15 being in Management, 20 on the teaching staff and 5 support staff.

Table.1: Showing the Study population.

Type of respondents	Number of people
Management	15
Teaching staff	20
Support/non teaching staff	5
Total	40

Source: Primary data

Sample size

The sample size of the study was 36 respondents from all the three sects.

Sampling methods

The study was based on stratified sampling method that enabled the collection of relevant data. The strata included; the teaching staff, management and the support staff.

Data collection methods

Questionnaires were the data collection tool used to extract the necessary data given the time constraint. They provide convenience with respect to time of respondents.

Sources of data

Data was collected from both primary and secondary sources.

- Primary sources

Primary data was collected from respondents concerned like those mentioned earlier.

- Secondary sources

Secondary data was collected from the original documents, books of accounts, the Board of Director's reports and other relevant documents.

Data processing and analysis

Data collected was organized, sorted and checked for accuracy and completeness: Data was tabulated, interpreted and analyzed in line with the study objectives.

1. PRESENTATION, INTERPRETATION AND ANALYSIS OF THE FINDINGS.

1.1 Introduction

In this chapter, findings of the study are presented, interpreted and discussed in relation to the study objectives as follows.

1.2.1 General findings of the study

This includes findings relating to all parts of the questionnaires.

Table 1.2.1: Shows the response rate

Response	Frequency	Percentage (%)
Response	29	80.6%
Non-response	7	19.4%
Total	36	100%

Source: primary data survey question 1

From the table above, out of 36 respondents only 29 answered the questionnaires making a percentage of 80.6% respondents and 7 people did not return the questionnaire which brings a total of 19.4% non respondents. This implies that almost every sect of the school had interest on knowing how the school is performing.

1.2.2 Findings on personal data

Table 1.2.2: Showing the gender of respondents

Gender	Frequency	Percentage (%)
Male	17	58.6%
Female	12	41.4%
Total	29	100%

Source primary data survey question 2

From the table above, 17(58.6%) of the respondents were male while 12(41.4%) were female. This implies that majority of them belong to the teaching staff that is made up of the highest number. This is as a result of being a secondary school where most students tend to despise female staff and therefore the only option is employing more of the male staff.

1.2.3 Marital status of the respondents

Table 1.2.3: Shows the marital status of respondents in Phoenix academy secondary.

Marital status	Frequency	Percentage (%)
Married	23	79.3%
Single	4	13.8%
Others	2	6.9%
Total	29	100%

Source: primary data survey question 3

From the findings it is clear that majority of the respondents (79.3%) are the married people followed by single (13.8%) and the minority respondents (6.9%). This implies that since

married people in most cases are associated with family problems, they tend not to implement and follow the cost-volume profit controls put in place to minimize the problem of high cost-volume profit operations.

1.2.4 on the education levels of the respondents.

Table 1.2.4: Showing the education levels of the respondents

Education	Frequency	Percentage (%)
'A' Level	03	10.4%
Diploma	8	27.6%
Certificate	-	0%
Degree	15	51.7%
Others	03	10.4%
Total	29	100%

Source: primary data survey question 4

From the above table, the majority of respondents (51.7%) are graduates followed by Diploma (27.6%), A-level (10.4%), others (10.4%) and none of the respondents hold a certificate. This implies that the school has well educated staff and management. This probably means that the management just lack ways of goods implementation of their objectives.

1.2.5 Period worked for the school

Table 1.2.5: Showing number of years respondents have worked in the school.

Number of years	Frequency	Percentage (%)
Less than 2years	2	6.9%
2-5years	10	34.5%
More than 5years	17	58.6%
Total	29	100%

Source primary data survey question 5

The above table indicates that majority respondents are in the range of more than 5years followed by those from 2-5years and then less than 2years. This implies the school has the ability to contain its staff once recruited. This enables in the reduction of replacement cost-volume profits and cost-volume profits of inefficiency of performance of the staff.

1.2.6 Position held in the school

Table 1.2.6: Showing different positions held by respondents in the school.

Position	Frequency	Percentage (%)
Management	7	24.1%
Teaching staff	19	65.5%
Support staff	3	10.3%
Others	-	0%
Total	29	100%

Source: primary data survey question 6

The findings indicate that 7(24.1%) belong to management 19(65.5%) belong to the teaching staff, 03(10.3%) belong to the support staff and none belong to any other position. The teaching staff dominated the respondents because they dominate the sample size suggested followed by management and the support staff.

1.3 Findings on cost-volume profit management

The following information presents interprets and discusses the findings on cost-volume profit management of Phoenix Academy as the second part of the questionnaire.

1.3.1 Findings on the extent to which the respondents agreed or disagreed with the employment of staff with appropriate skills and experience

Table 1.3.1: Showing response on employment of staff with appropriate skills and experience

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	08	18	03	-	-	29
Percentage (%)	27.6%	62.1%	10.4%	-	-	100%

Source: Primary data survey question 7

From table 1.3.1: 08 (27.6%) strongly agree that the staff recruits has appropriate skills and experience, 18(62.1%) agree with the statement and 03(10.4%) are not sure of which staff recruited and none of the respondents disagreed and strongly disagreed with the statement. This pattern of response indicates that employee skills and experience is a prerequisite in the recruitment and selection of staff, in abide to try to reduce on the cost-volume profits of training.

1.3.2 Respondents on the right number of people employed in the school.

Table 1.3.2: Showing on the extent to which respondents agree or disagree with the employment of the right number of staff.

Extent of agreement	SA	A	NS	D	SD	Total
Frequency	06	18	03	01	01	29
Percentage (%)	20.7%	63.8%	10.3%	03.4%	01.7%	100%

Source: Primary data survey question 8

As observed from the table 1.3.2 about. 06(20.7) strongly agree, 18(63.8%) agree, 03(10.3%) are not sure 01(03.4%) disagree and 01(10.3) are not sure 01(3.4%) disagree and 01(1.7%) strongly disagree with the statement. This implies that Phoenix Academy tries to match its staff with work requirements and work hard in order to avoid over and

under capacity. Work overload and extravagant salary payments as well as under employment of staff is reduced.

1.3.3 Findings on the extent to which the respondents agreed or disagreed with the buy of school items only when they are headed.

Table 1.3.3: Showing the response on buying of school items only when they are needed.

Extent of agreement	SA	A	NS	D	SD	Total
Frequency	03	15	03	07	01	29
Percentage (%)	10.3%	51.7%	08.6%	25.9%	03.4%	100%

Source: Primary data survey question 9

According to the above table 04(10.3%) strongly agree, 15(51.7%) Agree, 03(08.6%) not sure, 07(25.9%) disagree and 01(03.4%) strongly disagree with the above statement. This implies that the board is interested in applying just-in-time (JIT) approach in acquiring school properties in order to manage spending.

1.3.4 Findings on the extent to which the respondents agree or disagree with the proportionality of salary scale to the level of income.

Table 1.3.4: Showing response on proportionality of salary scale to the level of income

Extent of agreement	SA	A	NS	D	SD	Total
Frequency	-	02	12	05	10	29
Percentage (%)	-	6%	43.3%	17.2%	34.5%	100%

Source: Primary data survey question 10

From the table above, none strongly agreed with the statement that the salary scale of the school is proportional to the revenues, 02(6%) agreed, 12(43.3%) not sure, 05(17.2%) disagreed and 10(34.5%) strongly disagreed with the statement. This is due to the fact that majority of respondents are professionals whose salary scale is fixed and independent of the revenue levels and hence do not necessarily correspond with it. Even for the non-professionals like the support staffs are held to be constant.

1.3.5 Measures to counter fees defaulters

Table 1.3.5: Showing the response on the presence of measures to counter fees defaulters in the school.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	11	14	1	3	-	29
Percentage (%)	37.9%	48.3%	3.5%	10.6%	-	100%

Source: Primary data survey question 11

As observed from the above table 1.3.5 11(37.9%) strongly agreed with the statement, 14(48.3%) agreed, 01(3.5%) were not sure, 03(10.4%) disagreed and none strongly disagreed with the statement. The pattern of response stems from the fact that students are subjected to midterm exams whereby those with school fees balance are not allowed to sit them. This is according to the headmaster of the school, which according to him is enough to instill a sense of responsibility into students and parents regarding the in-time payment of school fees.

1.3.6 Findings on the extent to which the respondents agreed or disagreed with the outsourcing of some staff

Table 1.3.4: Showing response agreed or disagreed with the outsourcing of some staff

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	08	08	06	05	02	29
Percentage (%)	27.6%	27.6%	20.7%	17.2%	6.9%	100%

Source: Primary data survey question 12

As evidenced from table 1.3.6 above 08(27.6%) strongly agreed, 08(27.6%) agreed, 06(20.7%) were not sure, 05(17.2%) disagreed and 02(6.9%) strongly disagreed with the statement that the school outsource some staff. The outsourcing of staff pertains to the teaching staff especially during the end of the final year examinations for candidate classes to offer technical aspects to enable students perform better.

1.3.7 Findings on the extent to which the respondents agreed or disagreed with the keeping of variable cost-volume profits below 30% of income.

Table 1.3.7: Showing the responses on keeping variable cost-volume profits below 30% of income.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	01	06	10	8	5	29
Percentage (%)	3.5%	20.7%	34.5%	27.6%	17.2%	100%

Source: Primary data survey question 13

Table 1.3.7: Above indicates that 01(3.5%) strongly agreed with the statement, 06(20.7%) agreed, 10 (34.5%) were not sure, 08(27.6%) disagreed and 05(17.2%) strongly disagreed with the fact that variable cost-volume profits are kept below 30% of the incomes. This kind of response seems to have resulted from respondents' failure to distinguish fixed cost-volume profits from variable cost-volume profits especially the support staff. It is also true

that the cost-volume profits are mostly constituted by fixed cost-volume profits and the variable cost-volume profits according to management are immaterial.

1.3.8 Findings on the extent to which the respondents agreed with the giving of allowances to staff.

Table 1.3.8: Showing the responses on the giving of allowances to staff.

Extent of agreement	SA	A	N/S	D	S D	Total
Frequency	10	12	05	02	-	29
Percentage (%)	34.5 %	41.4 %	17.2 %	6.9 %	-	100 %

Source: Primary data survey question 14

Table 1.3.8 above shows that 10(34.5%) respondents strongly agreed with the statement, 12(41.4%) agreed, 05(17.2%) were not sure, 02 (6.9%) disagreed and no one strongly disagreed with the statement. This response is ideally based on the fact that only the teaching staff and management are entitled to such allowances and therefore the support staff was reluctant to consent hence uncertainty.

1.4 Findings on profitability

The following information presents, interprets and discusses the findings on profitability levels of the school.

1.4.1 Findings on the extent to which the respondents agreed or disagreed with the use of sales maximization approach to profits.

Table 1.4.1: Showing the response on the use of sales maximization approach to profits.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	07	15	01	03	03	29
Percentage (%)	24.1%	51.7%	3.5%	10.4%	10.4%	100%

Source: Primary data survey question 15

From the above table, 07(24.1%) respondents strongly agreed with the statement 15(51.7%) agreed, 01(3.5%) were not sure, 03(10.4%) disagreed and 03 (10.4%) strongly disagreed with the statement. This pattern was derived from the fact that is the school's intent to objectively lower the fees in order to attract a good number of students. According to the support staff the school has done a lot for the financially weaker parents to be able cover up their school dues.

1.4.2 Findings on the extent to which who agreed or disagreed with profit maximization as major objective of the school.

Table 1.4.2: showing the response on profit maximization as a major objective

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	10	08	02	06	03	29
Percentage (%)	34.5 %	27.6 %	6.9 %	20.7 %	10.4 %	100 %

Source: Primary data survey question 16

Table 1.4.2 above, indicates 10(34.5%) as strongly agree, 08(27.6%) agree, 02(6.9%) not sure, 06(20.7%) disagree and 03(10.4%) as strongly disagree with the statement. This is because profit maximization is ideally the opposite of sales maximization which the school decided to embark on and therefore one expected such results if there was some objectivity.

1.4.3 Findings on the extent to which the respondents agreed or disagreed with the inconsistency in the profits over the years.

Table 1.4.3: Showing the response on the inconsistency in the profits over the years.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	16	09	03	01	-	29
Percentage (%)	55.2%	31%	10.4%	3.5%	-	100%

Source: Primary data survey question 17

The findings are evidenced from the table 1.4.3, 16(55.2%) strongly agreed, 09(31%) agreed, 03(10.4%) were not sure, 01(3.5%) disagreed and none of the respondents strongly disagreed with the statement. The implication is that due to changing economic climate such as inflation rates, students joining the school, cost-volume profits have been changing leading to inconsistency profits.

1.4.4 Findings on the extent to which respondents agreed or disagreed with the 25% target profit on revenue.

Table 1.4.4: Shows the response on 25% target profit on revenue.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	02	05	20	02	-	29
Percentage (%)	6.9%	17.2%	69%	6.9%	-	100%

Source: Primary data survey question 18

As the table above exhibits 02(6.9%) strongly agreed, 05(17.6%) agreed, 20(69%) not sure, 02(6.9%) disagreed and none strongly disagreed implies that very few members of the school holding different positions are aware of the rate at which target profit is kept of the total revenue.

1.4.5 Findings on the extent to which the respondents agreed or disagreed with the steady growth of profits over the years.

Table 1.4.5: Showing the response on steady growth of profits over the years.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	03	05	07	08	06	29
Percentage (%)	10.4%	17.2%	24.1%	20.6%	20.7%	100%

Source: Primary data survey question 19

As observed from table 1.4.5, 03(10.4%) strongly agreed with the statement that the school's profits grows steadily over the years, 05 (17.2%) agreed, 07(24.1) were not sure, 08(27.6%) disagreed and 06(20.7%) strongly disagreed with the statement. This is based on the school's past financial experience evidenced from the financial reports. Therefore according to management, profitability of the school has been in very bad position.

1.5. Cost-volume profit management and profitability relationship

The following information presents, interprets, and discusses the findings on cost-volume profit management and profitability of Phoenix Academy Secondary School.

1.5.1 Findings on the extent to which the respondents agreed or disagreed with the carrying out of cost-volume profit-volume profit analysis.

Table 1.5.1: Showing response on the carrying out of cost-volume profit-volume profit analysis

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	04	05	10	08	02	29
Percentage (%)	13.8%	17.2%	34.5%	27.6%	6.9%	100%

Source: Primary data survey question 20

Table 1.5.1 above shows that 04(13.8%) strongly agreed with the statement that the school carried out cost-volume profit volume profit analysis, 05 (17.2%) agreed, 10(34.5%) were not sure, 08(27.6) disagreed and 02(6.9%) strongly disagreed.

This is because of the nature of the business (Service business) which is not easy for the respondents to know

how to measure volume in such a business. That is why respondents shared a high degree of uncertainty.

1.5.2 Findings on the extent to which the respondents agreed or disagreed with profitability being mainly influenced by cost-volume profit management.

Table 1.5.2: Showing the response

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	06	12	04	04	03	29
Percentage (%)	20.7%	41.4%	13.8%	13.8%	10.4%	100%

Source: Primary data survey question 21

From the above 06(20.7%) strongly agreed, 12(41.4%) agreed, 04(13.8%) were not sure, 04(13.8%) disagreed and 03(10.4%) strongly disagreed with the statement that profitability is influenced by cost-volume profit management. Therefore in this case cost-volume profit management is the prime and basic platform for profit maximization hence the school should improve on cost-volume profit management for it to be profitable.

1.5.3 Findings on the extent to which respondents agreed or disagreed with minimizing cost-volume profits in order to maximize profits.

Table 1.5.3: Shows the response

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	07	08	04	06	04	29
Percentage (%)	24.1%	27.6%	13.8%	20.7%	13.8%	100%

Source: Primary data survey question 22.

The table above indicates that 07(24.1%) strongly agreed, 08(27.6%) agreed, 04(13.8%) were not sure, 06(20.7%) disagreed and 04(13.8%) strongly disagreed with the statement that cost-volume profits are minimized in order to maximize profits. This brings out the fact that cost-volume profit management and profitability are inversely proportional and therefore cost-volume profit management should be improved if profits are to be maximized.

1.5.4 Findings on the extent to which the respondents agreed or disagreed with the preparation of annual budgets to streamline profitability.

Table 1.5.4: Shows the respondents.

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	07	10	06	03	03	29
Percentage (%)	24.1%	34.5%	20.7%	10.4%	10.4%	100%

Source: Primary data survey question 23

As evidenced from table 1.5.4 above, 07(24.1%) strongly agreed with the statement that the school prepares annual budgets, 10(34.5%) agreed, 06(20.7%) were not sure, 03(10.4%) disagreed and 03(10.4%) strongly disagreed with the statement. This response was attained because all sectors of the school know that at every beginning of any academic year meetings are held to communicate such budget to the possible stakeholders.

1.5.5 Findings on the extent to which the respondents agreed or disagreed with profitability being independent of cost-volume profit management.

Table 1.5.5: Showing the respondents

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	04	04	02	10	09	29
Percentage (%)	13.8%	13.8%	6.9%	34.5%	31%	100%

Source: Primary data survey question 24

From the table above, 04(13.8%) strongly agreed 04(13.8%) agreed, 02(6.9%) were not sure, 10(34.5%) disagreed and 09(31%) strongly disagreed that profits are independent of cost-volume profit management. This is because all respondents are quite sure that a high cost-volume profit implies low profitability.

1.5.6 Findings on the extent to which respondents agreed or disagreed with stability in cost-volume profits causing stability in profits.

Table 1.5.6: Showing the extent of respondents

Extent of agreement	SA	A	N/S	D	SD	Total
Frequency	09	13	03	03	01	29
Percentage (%)	31%	44.8%	10.4%	10.4%	3.5%	100%

Source: Primary data survey question 25

From the table 1.5.6, 09(31%) strongly agreed, 13(44.8%) agreed, 03(10.4%) were not sure, 03(10.4%) disagreed and 01(3.5%) strongly disagreed that stability in cost-volume profits implies stability in profits. A vast majority of the respondents unanimously agreed that stability in cost-volume profit management can cause stability in profits though for Phoenix Academy it is still a nightmare for them to manage and maintain any of the two variables.

II. CONCLUSIONS AND RECOMMENDATIONS

2.1 Conclusions:

The study shows that managing cost-volume profits take into consideration a number of tools ranging from analytical, managerial and administrative, such tools can be

summarized as employing the right number of staff with appropriate experience, outsourcing of some staff, using just in time technique. From the previous Tables indicated that profitability is independent to cost-volume profit management and therefore there should be effective cost-volume profit management controls in order to earn profits.

2.2 Recommendations:

Phoenix academy should improve on its cost-volume profit management practices in order to foster profitability and therefore the following policies should be observed to reduce the above.

- Make profitability the prime cause of the existence of the school.
- Develop other pecuniary motivational technique to motivate staff other than the monetary benefits.
- Reduce as much as possible the allowances given to staff if they cannot scrap them off completely.
- Develop on the academic standard of the school to attract students so as to earn more.
- Carryout a systematic cost-volume profit-volume-profit analysis.
- Have deadlines for school defaulter so as to be able sustain operational cost-volume profits.

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